Armed Forces College of Medicine

AFCM

Endocrine and urogenital module

Clinical Integrated Cases

Pretest 3

Question 1

The two horizontal planes marking the surface anatomy of the kidney pass through which of the following spines?

A.T10 & L1
B.T10 & L2
C.T11 & L2
D.T11 & L3
E.T12 & L3

Question 2

During posterior surgical approach of the kidney, which of the following nerves are liable to be injured?

A. Obturator
B. Femoral
C. Femoral branch of genitofemoral
D. Phrenic
E. Ilioinguinal

Question 3

Which of the following cells is a component of the juxtaglomerular complex?

a.Podocytes.

b.Macula densa.

c.Intraglomerular mesangial cells.

d.Principal cells.

e.Intercalated cells

Question 4

What is the component of the glomerular filtration barrier which holds back blood cells but allows fluid and large molecules to pass freely?

a.Mesangial cells.

b.Filtration slit diaphragm.

c.Fenestrated endothelium.

d.Glomerular basement membrane.

e.Bowman's capsule.

Question 5

In diabetic patients, blood glucose level is monitored over a period of 2-3 months by using which of the following tests?

a) Serum fructosamine

b) Hemoglobin a_1 c

c) Microalbuminurea

d) Random blood sugar

e) 2 hours after glucose load

Question 6

Serum creatinine level is decreased in which of the following conditions?

a)Acute tubular necrosis
b)Urinary tract obstruction
c)Chronic renal failure
d)Muscle atrophy
e)Acromegaly

Question 7

A 60-year-old man is brought to the emergency department by his wife for progressively worsening confusion. He has hypertension and chronic kidney disease that requires hemodialysis. He missed his last dialysis appointment. Laboratory studies show a serum creatin ets of arteria ?

	pH	Bicarbonate (mEq/L)	PCO_2 (mmHg)	Anion gap
A	7.28	15	29	18
B	7.49	28	25	10
C	7.51	33	48	12
D	7.37	14	22	14
E	7.31	18	33	8

Question 8

Which of the following substances can be used to assess the glomerular filtration rate (GFR) accurately?

A. Creatinine

B. Inulin

C. Urea

D. Para-aminohippuric acid (PHA)

E. Glucose

Question 9

A 57-year-old woman complained of puffiness of her eye lids and bilateral lower limb edema. She had a history of uncontrolled diabetes of 10 years duration. Urine analysis revealed 3.7 gm protein /day. Renal biopsy was done and examined microscopically Which of the following is the most probable diagnosis?

a)Minimal change glomerulonephritis
b)Membranous glomerulonephritis
c)Diffuse and nodular glomerulosclerosis
d)Membrano-proliferative glomerulonephritis

Question 10

Which of the following defines diabetic microangiopathy?

a)Diffuse thickening of glomerular capillary basement membrane
b)Atherosclerosis of the renal aretery
c)Thrombosis of the glomerular capillaries
d)Hyalinosis of the afferent and efferent arterioles
e)Pressure atrophy of the media of renal artery

Question 11

Lisinopril is the best choice as antihypertensive agent in diabetic patients because:

a.Has short T1/2
b.Least adverse effects
c.Diminishes proteinuria and stabilizes renal function
d.Has higher bioavailability
e.It isn’t highly bounded to plasma proteins

Question 12

Glargine (long-acting insulin) is injected:

a.Every 12 hours / day
b. Once / day
c.Three times before meals / day
d.Two times before meals / day
e.Two times after meals /day

Question 13

Which of the following criteria is used to define a Nephrotic syndrome?

a. Protein in the urine (more than 3.5 grams per day)
b. Renal failure within hours
c. Red Blood Cell casts in urine
d. Macroscopic hematuria
e. Diffuse glomerular crescent in biopsy

Question 14

A 70-year-old man with diabetes mellitus and hypertension has the following serum chemistries: Electrolytes (mmol/L): Na: 138mmol/l, Cl: 106mmol/l, HCO3 20 mmol/l. Glucose: 130 mg/dL, Creatinine: 1.2 mg/dl. patient has no diarrhea.

Calculation for anion gap is:

A. 10
B. 12
C. 8
D. 20
E. 18


Thank
you